

PUBLIC COMMENTS RECEIVED ON TENTATIVE ORDER R9-2003-0001

The Regional Board received the following comments from the City of San Diego by letter dated February 26, 2003. The Regional Board staff appreciates the effort made by the City of San Diego staff to prepare and submit these comments. The Regional Board staff has revised the tentative Order to incorporate some of the comments and provided an explanation for why others were not incorporated. The comments listed below address Tentative Order No. R9-2003-0001. Regional Board staff responses to comments are indicated in “*italicized bold*” font.

1. *It is unclear what list of sites must comply with this new tentative order. Suggest attaching the list to this draft order.*

Response: The list of sites that must comply with this tentative Order is contained in Attachment No. 1 to tentative Order No. R9-2003-0001.

2. *This proposed revision requires additional work, primarily “Assessment of Interim Cover Requirements” for sites that are inactive or closed. Generally, sites such as these do not generate revenues to fund such additional proposed work, therefore Paragraph 22, item “g,” on page 5 of the tentative order which cites “Economic considerations” has not been taken into account. If this cover assessment requirement is adopted, we recommend that the frequency of performing this assessment be extended to every twenty years in order to reduce the cost of compliance.*

Response: In the absence of a formal “closure” under CCR Title 27, interim or intermediate landfill covers may be required to meet the performance standards (CCR Title 27, Sect. 20705) for extended periods of time. Under these conditions, as is the case with the landfills listed in tentative Order R9-2003-0001, it is reasonable to require a periodic assessment of the effectiveness of the “interim” landfill cover system. A periodic assessment of the thickness and nature of the materials comprising the interim landfill cover system is an essential component of the required evaluation.

The five-year interval for the cover assessment corresponds with the time interval when the WDRs will be reviewed and revised as necessary by the RWQCB. The information provided by the interim cover assessment will be useful in determining if additional requirements are required during future review/revision periods for these General WDRs. The original language should be retained in the tentative Order.

3. *The justification cited in this tentative order to require the “Assessment of Interim Cover Requirements” is insufficient. We propose that this requirement be applied only to those sites where evidence such as groundwater monitoring shows that contamination has occurred due to leachate or percolation of precipitation thru wastes.*

Response: Interim landfill covers must be designed and constructed to minimize percolation of precipitation through wastes [27CCR §20705]. A periodic assessment of the thickness of materials comprising the intermediate landfill cover systems is necessary to maintain the integrity of the waste containment system at inactive landfills.

Pre-1984 MSW landfills are existing reservoirs of solid wastes, waste constituents, and degradation products derived from those wastes. A release of wastes, waste constituents or degradation products derived therefrom may create a condition of pollution or nuisance as defined under Water Code Section 13050. In order to minimize that threat, it is necessary to implement regular activities associated with post-closure maintenance activities and monitoring. In the event of a release of wastes, waste constituents or degradation products from the waste management unit; implementation of corrective actions may also be necessary to protect the quality of the waters of the State. The financial responsibility for implementing post-closure maintenance, monitoring, and corrective actions are the responsibility of the dischargers (owners) of pre-1984 MSW landfills. The original language should be retained in the tentative Order.

4. *Page 10, paragraph C-19: existing rules and laws make the “Assessment of Interim Cover Requirements” unnecessary. NPDES requirements allow for little or no silt runoff from these sites and BMP’s are already a part of the existing WDR; Air Pollution Control District Rule 59 does not allow methane emissions to exceed 500PPM at the surface. Just these two rules alone ensure that adequate cover must exist, and that erosion is controlled. There is no direction here of what constitutes a “technical assessment.” What is an acceptable grid spacing for assessment? How deep should an investigation go? Some sites have over one hundred acres in area- this assessment could be very expensive if some cost control measures are not specified. Economic considerations of this measure have not been addressed in this tentative order.*

Response: The Monitoring and Reporting Program (MRP) specifies that the “depth of investigation” must be at least 24-inches. The RWQCB requires that interim landfill covers meet the performance standard indicated in CCR Title 27, § 20705. The thickness standard cited in the comment appears to reference CCR Title 27, § 20700 which states “... at least twelve (12) inches”, which should be regarded as a minimum thickness for purposes of the CIWMB requirements.

There is no “minimum cover thickness” specified in the current tentative Order. Rather, the results from the periodic assessment of the interim landfill cover are intended to help the dischargers and the Regional Board regularly evaluate the effectiveness and integrity of the existing interim landfill cover system. Where the interim landfill cover also contains a component of “pavement” (described as “asphalt” or “concrete”) the discharger should include this factor into the

periodic assessment report. Note that in order to be considered an effective barrier component of the interim landfill cover “pavement” must be regularly maintained to mitigate against the effects of subsidence, wear, and degradation (e.g., cracking, crumbling, etc.) over time. In addition, the installation of pavement on an interim landfill cover may also require that additional storm water conveyance BMPs be installed and maintained to: a.) prevent the effects of erosion upon any “unpaved” areas of the interim landfill cover; and b.) mitigate the potential for illegal storm water discharge that may develop as a result of the increased surface water runoff from “paved” areas of the facility.

There are no criteria established for grid spacing for the assessment of the interim cover. The City of San Diego will need to develop its own criteria for grid spacing to ensure the survey results are representative of the interim cover on the landfill regulated by this tentative Order. The original language should be retained in the tentative Order.

5. *The threat category “I” addressed in page 2, paragraph 7 should only be applied to those sites proven to be leaking. The SWAT results cited in Paragraph 6 could be used to assign this threat category ONLY TO THOSE SITES PROVEN TO BE LEAKING. This is also an economic issue, as the designation “I-B” threat to water quality leads to a \$16,875./yr/site permit fee and this is an economic hardship for small inactive sites with no revenue stream.*

Response: *The threat to water quality ranking (TTWQ/CPLX) ranking for the inactive landfills has not been changed in R9-2003-0001. The threat ranking (AKA TTWQ/CPLX) of "I-B" is the same as applied to these sites under Order 97-11. At this point in time, it is important to note that if we do nothing the TTWQ/CPLX rating and associated fee for your sites enrolled in Order 97-11 will remain at "I-B". The ranking system is based upon an assessed "threat level" and does not require that a landfill be leaking to warrant a threat category of "I". You may wish to review the item regarding fees and the criteria used by the Regional Boards for assigning TTWQ/CPLX rankings on the State Board web site at: www.swrcb.ca.gov under "WATER NEWS" item referencing fees.*

Your point about the threat to water quality from "leaking landfills" is well taken. In 2002, the Regional Board Executive Officer did assign threat levels of "I-A" (current fees at \$20,000) to inactive landfills determined to be leaking waste constituents into aquifers located in sensitive areas of our Region (e.g., San Marcos, Anza, and Forster Canyon- Orange County). In addition, the sites that are determined to be leaking waste constituents may also make the dischargers liable for additional costs associated with implementing evaluation monitoring (EMP) and/or corrective action programs under CCR Title 27 [see requirements for pre-1984 CAI sites referenced in Sec. 20090(g)]. The original threat to water quality ranking should be retained in the tentative Order.

6. *Page 2, paragraph 10: requiring new WDR's for soil stockpiles is unnecessary regulation, would add expense, and thereby would discourage the addition of soil cover to these older, inactive sites. The accumulation and reuse of stockpiled soils is often driven by economics. As for erosion control, BMP's for these sites are already required and would apply to any soil at the site, including stockpiles. If BMP's are in place, timely reuse of the stockpiles should not be an issue. If this paragraph is retained, then a "stockpile" should be defined, such as minimum number of cubic yards, length of time in place, etc.*

Response: *The County of San Diego DPW staff requested that the tentative Order include provisions for importation and management of soil stockpiles for maintenance at landfill sites. Their perspective on this topic was that they acquire soils under short turn-around times and they wanted a means to temporarily stockpile soils onsite until they could be used for maintenance of the landfill cover system. This seemed like a reasonable request since uncontrolled stockpiles of soil may result in erosion control and storm water discharge problems from landfill sites. If the City does not stockpile soils at its landfill sites, these requirements do not apply.*

The conditions specified in the tentative Orders are not really new since they are very similar to our proposed waiver policy for management of stockpiles (adopted by the Regional Board on 9/11/02 - Resolution 2002-0186). The original language should be retained in the tentative Order.

7. *Page 7, paragraph C-1 gives six months from adoption of this order to submit a current or updated cover maintenance plan. The previous draft R9-2002-0315 gave until June 1, 2004 and this is preferable. Maps required by this section showing gas systems, cover features, BMP's, etc, are not available for all sites and would require sufficient time to create.*

Response: *It should be noted that Addendum No. 1 to Order No. 97-11 (the Order that these sites are currently regulated under) required the submittal of a maintenance plan by January 1, 2001. Since tentative Order No. R9-2003-001, would, if adopted, supersede Order No. 97-11 and addenda thereto; the City of San Diego should have complied with this requirement two years ago. In order to comply with the requirement contained in tentative Order No. R9-2003-001, the City of San Diego would only need to revise its current maintenance plan for each site regulated by this Order. The original language should be retained in the tentative Order.*

8. *Page 8, paragraphs "f" through "h" require descriptions and maps that would already be part of the NPDES permit which many of these sites have. To prevent a duplication of effort and unnecessary files, we request an exclusion from these requirements for those sites with NPDES permits in place.*

Response: *The information required to be submitted under paragraphs “f” through “h” are items that should already be included in the Stormwater Pollution Prevention Plan for each landfill subject to the general industrial stormwater permit. To comply with this requirement, the City would need to provide copies of this information as part of the maintenance plan. The original language should be retained in the tentative Order.*

9. *Page 9, paragraph 8, the October 31st date should be stated as a “goal.” The San Diego region is drier than many other regions of the State. Dry years could provide additional time to stage construction among many site, thus saving expense.*

Response: *It is necessary to have BMPs installed before the rainy season begins (normally November – April). The purpose is to ensure that the landfill has maintained the site and has implemented adequate BMPs to ensure protection against erosion. The original language should be retained in the tentative Order.*

10. *Page 11, paragraph D-4 it is unclear why there should be a public noticing requirement for stockpiles? Perhaps this paragraph is intended to go under section C for general maintenance requirements. This public noticing requirement is untenable for those sites that are within public parks and already have names associated with them related to their park use; or have managers and associated contact information related to the site’s park use.*

Response: *It is necessary for the public to have a point of contact to call in the event of a problem at the landfill. Please demonstrate compliance with this requirement in the next semiannual monitoring report. The original language should be retained in the tentative Order.*

11. *Page 11, paragraph D-6, other methods besides plastic sheeting should be allowed for temporary soil stockpiles. BMP’s include a wide range of methods to control erosion, dust, or other nuisances. Examples include mulch cover, tackifier agents, and straw mats to name a few. In general, additional requirements such as this one for stockpiling will only discourage the placement of additional cover at these inactive sites due to added costs and complexity.*

Response: *The following modification should be made to the original language in section D.6 of tentative Order No. R9-2003-0001:*

“Cover: All temporary soil stockpiles shall be overlain by plastic sheeting (not less than 10 mils thick) or be protected by adequately maintained BMPs such as (but not limited to) tackified straw, bonded fiber matrix, wattles, and/or silt fence to adequately control erosion by storm water, control fugitive dust, and other nuisances.”

12. *Page 12, paragraph 5, Financial Assurance . . . how should small inactive sites with no revenue streams be funded? Economic considerations of this measure have not been addressed in this tentative Order.*

Response: *The requirement for dischargers to establish and maintain assurances of financial responsibility have been a part of state regulatory requirements covering landfills for a long period of time [see CCR Title 23, Chapter 15, § 2550(b)]. The State regulatory requirements for dischargers to provide Financial Assurances specifically naming the Regional Board as the beneficiary may be found in CCR Title 27, §20380(a), §22212(a) and §22222. However, it is not unreasonable to extend the due date for obtaining financial assurances to a period of 1 year.*

The original language of the tentative Order should be modified Section E.5. as follows:

“Within one year of the adoption of this Order, the discharger shall establish and maintain adequate and acceptable assurances of financial responsibility throughout the post-closure monitoring and maintenance period. The discharger shall establish an irrevocable fund (or provide some other instrument acceptable to the RWQCB), with the RWQCB named as beneficiary. The purposes of the required financial assurance instruments are as follows:

- a. to ensure that funds are available to conduct post-closure maintenance at each inactive waste management unit in accordance with this Order, and*
- b. to ensure that funds are available to address known or reasonably foreseeable releases from the waste management unit.*

When the discharger notifies the RWQCB of a transfer of ownership (per Provision E.8 and Reporting Requirement F.3), the notification shall include a proposed schedule for the succeeding owner to provide evidence of acceptable financial assurance responsibility to the RWQCB.

13. *Page 6 of the MRP, item 4, Interim Landfill Cover Assessment is to be performed every 4 years but page 10, paragraph C-19, says every 5 years? Also, requiring field measurements during the time frame May-June conflicts with the gnatcatcher breeding season of February thru September. Some sites have gnatcatcher habitat on some portions of the cover that prevents disturbance during this period.*

Response: *The five year reporting interval was selected because it coincides with the time interval that the RWQCB must perform our review/revisions of the WDRs. Reports to be Filed with the Board, D.4 of the MRP has been modified to read as follows:*

“Baseline Assessment Report for Interim Landfill Cover

Beginning in 2005, the discharger shall measure the existing thickness to establish a baseline value (Baseline Study). The values established in the Baseline Study shall be compared with data collected during the Interim Landfill Cover Assessment to evaluate cover conditions (see Section D.5 below). Field measurements shall be completed during the timeframe from January-June of the reporting year. A technical report shall be submitted to the RWQCB containing the results from the Baseline Landfill Cover Assessment Study along with a technical assessment of the effectiveness of the existing interim landfill cover. The Baseline Study of the interim landfill cover system shall include the following minimum information:

- a. A clearly written description of the rationale and technical basis for the sampling protocol(s), data collection, and data analysis methods used to assess the performance of the landfill cover system.*
- b. Clearly written discussions of field methods used to assess the thickness and effectiveness of the interim landfill cover system. The discussions should include the method(s) used to measure the cover thickness, criteria for terminating the depth of measurement at each sample point, methods used to backfill sampling points, and methods used to assess the effectiveness of the landfill cover system.*
- c. A plot plan, prepared at an appropriate scale, that can be used to clearly illustrate the topographic elevations of the top deck, intermediate benches, and side-slopes of the waste management unit(s) (WMUs). A ground survey shall be performed by a licensed land surveyor to obtain current elevations of the top deck, intermediate benches, and side-slopes of the WMUs. The locations of sample control points used to assess the thickness of the landfill cover system shall be clearly indicated and labeled on the plot plan*
- d. A tabulation of results from field measurements of the landfill cover system. The table shall include the sample point identification label, elevation of the landfill cover at the sampling point, the depth of the landfill cover at the sampling point. Measurements of the landfill cover system must be made to a depth of at least 24-inches below existing grade.*
- e. A clearly written evaluation of: the results from the landfill cover system evaluation. The assessment shall include an evaluation of the cover performance with respect to minimizing percolation of precipitation and conveying storm water off the landfill cover system, recommendations for required maintenance of the landfill cover system, and a proposed schedule for completing the recommended maintenance work.”*

This modified language ensures that the assessment of the interim cover could be done in January prior to the gnatcatcher season.

14. *Page 3 of the MRP, Item A.9.g: MDLs and PQLs are laboratory-derived values that may be changed as part of Standard Operating Procedures for routine instrument calibration studies. It is recommended that the second sentence of this provision be worded to read: “In the event that a Monitoring Parameter (Mpar) MDL and/or PQL change, other than from a change associated with routine laboratory instrument calibration studies, the discharger shall highlight . . .”*

Response: *If there is any change to either the MDL or PQL, it shall be noted in the monitoring report. A change in these limits could impact our evaluation of ground water monitoring data submitted in the discharger’s monitoring report. The original language should be retained in the tentative Order.*

15. *Page 4 of the MRP, Item C.4: This item should be remove from the M&RP. It is not practical to measure an immiscible layer on groundwater if the well is equipped with a dedicated pump. Further, unless the groundwater chemistry indicates significant measurable concentrations of light non-aqueous phase liquids (LNAPLs), which in our experience are not commonly associated with landfills, there is no reason to suspect the development of an immiscible layer.*

Response: *It may be difficult to determine the presence of an immiscible layer with a dedicated pump in a ground water monitoring well. If this is the case, it should be noted in the monitoring reports. The visual observation for an immiscible layer is required for all ground water monitoring wells for landfills regulated by this region. The original language should be retained in the tentative Order.*

16. *Page 8, Item D.4.f: The requirements to provide an assessment of the effectiveness of the cover is unclear. Thin covers may be less effective compared with thick covers, but the level of effort expected by the RWQCB is uncertain (e.g. quantitative versus qualitative evaluation). More clarification may be needed on this aspect of the evaluation.*

Response: *This tentative Order requires an assessment of the effectiveness of the interim cover. This assessment will help Regional Board determine whether or not the existing cover is sufficient to meet the performance standards contained in Title 27, California Code of Regulations, Section 20705. The assessment shall include an evaluation of the interim cover thickness, amount of vegetation, pavement, etc. The original language should be retained in the tentative Order.*